

the precipitate of protoxide of copper is probably caused in both instances by the presence of glucose in the sap.

The author has extended his investigations to some herbaceous plants, and proposes communicating his results to the Academy of Sciences very shortly. He mentions as one of them, that the spiral fibres of the reticulated, annular and spiro-annular, and other similar vessels also present in their interior a red precipitate, formed of small flakes, of a blackish-brown colour when observed under a high power, and apparently identical with that mentioned above. This fact appears to confirm the views of M. Trécul on the structure of these fibres.—*Comptes Rendus*, June 1, 1863, p. 1048.

*The Mode of Development of the Marginal Tentacles in the free Medusoids of some Hydroïda.* By A. AGASSIZ.

M. Agassiz has investigated a point hitherto neglected in the development of the medusoids, namely, the mode of appearance of their marginal tentacles. Each medusoid has really originally a limited number of tentacles, which is subsequently increased by the successive appearance of several series of new tentacles. The series of tentacles in these Acalephæ may be compared to the cycles of septa in the Zoantharian polypes; and, in fact, their order of appearance coincides in certain cases with that of the visceral chambers of the polypes, although the exceptions to this rule are very numerous. It is also to be observed that in the Zoantharia the number of chambers of the first cycle is almost always six. In the Acalephs the number of tentacles of the first series is, on the contrary, extremely variable. For a great number of genera M. Agassiz has drawn up formulæ showing the order of succession of the tentacles of different series.

Certain Acalephs are singular, such as the medusoids of some *Tubulariæ*. That of *Corymorpha pendula*, for example, has only a single tentacle of the first series. The tentacles of the second series are two in number, and placed at the extremities of a diameter perpendicular to that corresponding with the tentacle of the first series. The third series consists of a single tentacle, opposite to that of the first series.—*Proc. Boston Soc. Nat. Hist.*, August 1862; *Bibl. Univ.*, 1863; *Bull. Scient.*, p. 161.

*On the Question whether Diatoms live on the Sea-bottom at great Depths.* By WM. STIMPSON, M.D.

In a paper on the Diatomaceæ found in mud collected at great depths from the bottom of the sea off the coast of Kamtschatka, in soundings made by the North Pacific Expedition under Commander Rodgers (*Silliman's Journal*, ser. 2. vol. xxi. p. 284), the late lamented Professor Bailey made the following remark:—"The perfect condition of the organisms in these soundings, and the fact that some of them retain their soft parts, indicate that they were very